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JANUARY, 1930

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Bulletin Number 29

**Secondary-School
Studies**

**The Department of Secondary-School Principals
of the National Education Association**

H. V. CHURCH, Executive Secretary

3129 Wenonah Avenue, Berwyn, Illinois

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Department of Secondary-School
Principals of the
National (Education)

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All communications for secondary-school administration abstract service should be directed to H. V. Church, 3129 Wenonah Avenue, Berwyn, Illinois; J. Sterling Morton High School, Cicero, Illinois, Executive Secretary of the Department of Secondary-School Principals of the National Education Association.

These abstracts are free to all members of the Department of Secondary-School Principals of the National Education Association.

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Secondary-School Studies

On September 15, 1929, the following letter was sent by the chairman of the Committee on Organization of Investigations in Secondary Education to about one hundred and fifty principals of secondary schools:

At a meeting of the Committee of the Department of Secondary-School Principals which is listed on this letter-head it was decided to extend the scope of the project which was inaugurated last year. Some thirty groups of high-school principals carried on co-operative investigations last year. The topic most commonly selected by these groups was the relative efficiency of large and small classes.

For the coming year it is hoped to secure the organization of a number of new groups and to continue the activities of all of the groups which were organized last year.

The committee also decided to suggest several new lines of work and to supply the centers with bibliographies prepared by the members of the committee. A statement of the topics proposed and the bibliographies are enclosed. (See pp. 21-31.)

The committee is anxious to secure reports of the work of the various groups and is making arrangements to publish such reports in the bulletins of the Department.

This letter is being sent to about 150 principals who, it is hoped, will be able to undertake the organization of groups. In some cases this means merely continuation of an organization which is already in existence. In other cases it means starting a new organization. It is possible in almost all parts of the country to bring together as frequently as once a month administrative officers of from five to twenty high schools. It is urged by the committee that this be done wherever possible and that groups of the type suggested begin a definite experimental co-operative attack on some problem of the kind suggested in the enclosed document.

The committee of the Department is anxious to keep in contact with all the groups. It will be glad to receive from the leader of the group an account of the personnel of the organization and any publishable material which results from the investigations undertaken. Such communications sent to the chairman will be used to the advantage of the members of the Department.

Very truly yours,
CHARLES H. JUDD,
For the Committee.

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DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

The Committee on Organization of Investigations in Secondary Education recommends to groups of principals that they undertake co-operative investigations during the year of some single topic.

The national inquiry to be conducted by the Bureau of Education will undoubtedly make exacting demands on the high-school principals of the country in the next few years and it will be essential to the success of that inquiry that every request for information be met promptly and efficiently. There can be no doubt that organized groups of principals will be able to assist the Commissioner of Education more effectively than isolated individuals.

Co-operation with the national inquiry may in the future delay somewhat investigation of special problems selected at this time but groups are urged to undertake special investigations even though they may be temporarily side-tracked later. Concrete suggestions are offered by the committee not with the idea of limiting the work of groups but with a view to securing somewhat comparable materials from different sections of the country. Some of the groups may have local problems on which they can work more advantageously than on the general problems here outlined. The following topics are described in the hope of helping those groups which are ready to take up general problems.

- I. *A study of large and small classes.* The original statement sent to groups organized in 1927-28 is reproduced herewith. Extracts from reports rendered by some of the groups are to be found in Bulletin No. 25 of the Department, pages 52-61. A bibliography is included herewith on later pages. The original statement is as follows: "Each principal should organize at least one large class and should visit it at least three times a month for a full session each time with a view to discovering the methods of work which are appropriate and successful in dealing with large classes. Tests of classes should be made and comparisons should be made between large and small classes. The numbers of a particular group should report their findings to one another for several months and should then formulate a general report based on their discussions."
- II. *Induction into effective service of new teachers in your school.* This topic is intended to suggest the careful analysis of practices in different high schools in training teachers (whether they have had earlier experience or not) in the methods and ideals of a given school. Even where teachers have taught in other schools, it is commonly necessary to acquaint them with the curriculum and modes of discipline and general organization of the school which they are now entering for the first time. The principal must also devise legitimate means of checking the work of teachers and evaluating this work so as to determine the degree of its success or otherwise. The principal has methods of conferring with individual teachers or groups

of teachers and has methods, also, of keeping records of the progress made by an individual teacher. These and other devices should be discussed. A group of principals can, through discussion and subsequent experimentation, come to a determination of the methods which are most successful in dealing with new teachers. A bibliography is supplied.

III. *Merits and demerits of ability grouping of pupils.* This suggestion is intended to raise the general question of the effects of homogeneous grouping on instruction. It is intended, also, to induce the discussion groups to compare the various methods by which individual principals classify students in order to produce homogeneous groups. Other questions which will naturally arise have to do with methods of instruction. Should the slower group have the same curriculum administered to it as is administered to the fast group? How should the marks awarded to the various groups be adjusted? Other questions relating to ability grouping will suggest themselves in addition to those already mentioned. A bibliography is supplied.

IV. *Special problems for small high schools.* It is to be hoped that some of the discussion centers will develop in communities where the high schools are too small to deal with such items as I and III mentioned in the foregoing statements. Small high schools have a limited curriculum. Teachers must of necessity deal with more subjects than do teachers in the larger high schools. These and other problems of the small high school undoubtedly call for serious attention on the part of state departments as well as individual principals. They are of great importance in view of the fact that a great majority of the high schools of the country are small high schools. A bibliography is supplied.

Studies in Class Size Class Size in Senior American History

Conducted by

MR. L. S. BLOOMFIELD in John Adams High School, Cleveland, Ohio.

This experiment concerns a phase of class size in which there seems to be a wealth of unsubstantiated opinion and a dearth of definite figures upon which to base an opinion. Primarily it is as much of an experiment in the field of school administration as it is in the field of instruction. We submit the accompanying table of figures covering a semester's observation and recording of marks. Ostensibly these figures show comparative marks of a large and a small class and are entirely of an objective nature. The main question which these figures present is, what relation does the size of a class have to the amount of objective information which the pupils acquire.

Let it be said that the bogey of time-honored precedence has been strongly against the large class, so one is immediately thrown upon the offensive in presenting a study of this sort. However, in collecting these figures we hold no brief for the cause of the large class or for the cause of the small class. More study is needed. If efficiency and the economics of the case transcend the sentimental and traditional, the latter must as an intelligent consequence give way.

THE SET-UP OF THE CLASSES

The difficulties of this experiment were not great in the matter of relating the two constants, size of class and subject matter, but rather in the matter of eliminating the many variables and subjective elements. The inaccuracy and inadequacy of any such figures presented lie in these variables and subjective elements.

The major incentive to a study of large class instruction is the economic one, as to whether an instructor's pupil-load may be increased with no impairment in the quality of instruction. We would emphasize especially that this experiment was conducted along with a full teaching load, for otherwise, the experiment would have been under abnormal conditions and subject to the criticism that by reason of a shortened program the instructor could devote more than the allotted time to the classes under observation. In such a case there would be no economy effected and the validity of the experiment would straightway be in question. Inevitably with the large class there would be additional clerical work in conjunction with the objective tests. For the purpose of this work a student assistant was used to the extent of about five hours a week. It will be seen, then, that the large class was not so much an experimental class at all but an actual class, included in the full teaching load of the instructor.

Two groups were initially chosen, a group of 30 and one of 55, the large class meeting the sixth and the small class the seventh period in the day, in the same room and with the same instructor. This arrangement assured, to as large a degree as was possible, similar physical

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and instructional conditions. We would rather believe for senior students that the slight difference in the time of class meeting was negligible.

Next, both classes were given two tests, the Terman Intelligence Test and a general test in American History. The first was of the regular type and needs no further comment, the second, prepared by the instructor, was a composite mimeographed test composed of true and false statements, single response, chronological arrangement, multiple choice, and matching elements, each part weighed equally for scoring. The object in giving these tests was to measure the two important variables, native intelligence and the previously acquired knowledge of the subject. With these results in hand the thirty pupils of the small class were matched pupil by pupil with thirty pupils in the large class, with the same or as near as it was possible the same score in their Terman Test and in the General American History Test. The scores, therefore, for the large class as shown in Table II are for the

TABLE I
Test Results for Large and Small Classes

| | Large Class (55) | Small Class (30) | V. L.** | V. S.** |
|---------------------------|---------------------|---------------------|---------|---------|
| Terman Test | 105* | 105 | 0 | 0 |
| General Test A | 61 | 61 | 0 | 0 |
| Test No. 1 | 53 | 48 | 5 | 0 |
| Test No. 2 | 55 | 58 | 0 | 3 |
| Test No. 3 | 50 | 53 | 0 | 3 |
| Test No. 4 | 60 | 58 | 2 | 0 |
| Test No. 5 | 52 | 48 | 4 | 0 |
| Test No. 6 | 56 | 53 | 3 | 0 |
| Test No. 7 | 55 | 59 | 0 | 4 |
| Test No. 8 | 52 | 49 | 3 | 0 |
| Test No. 9 | 63 | 61 | 2 | 0 |
| True and False Test No. 1 | 23 | 23 | 0 | 0 |
| True and False Test No. 2 | 68 | 65 | 3 | 0 |
| True and False Test No. 3 | 78 | 78 | 0 | 0 |
| General Test A (repeat) | 80 | 79 | 1 | 0 |
| Average all Tests (13) | 57.3 | 56.3 | 1 | 0 |

*Mean given for all tests.

**V. L. is variation of large class over small class and V. S. is the variation of the small class over the large class.

thirty pupils out of the fifty-five who were compared with the small class. As will be observed, the means of the scores in both tests are identical and would therefore give a relatively sound basis upon which to proceed with the experiment.

DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

TABLE II
Rating of Sixty Paired Pupils on Intelligence Quotients and Achievement Test Scores Selected from Large and Small Classes.

| Pupil | Entire Small Class | | Thirty Selected Pupils of Large Class | |
|----------------|--------------------|--------------|---------------------------------------|--------------|
| | I. Q. | Test | I. Q. | Test |
| 1. | 102 | 55 | 102 | 47 |
| 2. | 113 | 57 | 114 | 64 |
| 3. | 105 | 71 | 104 | 71 |
| 4. | 96 | 50 | 92 | 48 |
| 5. | 109 | 75 | 109 | 70 |
| 6. | 117 | 70 | 117 | 71 |
| 7. | 104 | 60 | 105 | 63 |
| 8. | 100 | 43 | 100 | 41 |
| 9. | 100 | 49 | 100 | 47 |
| 10. | 109 | 71 | 109 | 71 |
| 11. | 118 | 78 | 118 | 81 |
| 12. | 108 | 77 | 107 | 77 |
| 13. | 108 | 81 | 109 | 83 |
| 14. | 113 | 58 | 111 | 64 |
| 15. | 92 | 33 | 94 | 34 |
| 16. | 113 | 74 | 111 | 74 |
| 17. | 100 | 64 | 96 | 64 |
| 18. | 108 | 59 | 107 | 56 |
| 19. | 101 | 57 | 100 | 59 |
| 20. | 104 | 57 | 107 | 63 |
| 21. | 102 | 48 | 101 | 41 |
| 22. | 91 | 44 | 98 | 44 |
| 23. | 102 | 70 | 102 | 74 |
| 24. | 100 | 79 | 108 | 79 |
| 25. | 113 | 57 | 111 | 52 |
| 26. | 109 | 50 | 109 | 52 |
| 27. | 104 | 57 | 104 | 55 |
| 28. | 113 | 72 | 114 | 73 |
| 29. | 98 | 58 | 96 | 57 |
| 30. | 100 | 72 | 100 | 72 |
| Average | | 104.7 | 64.5 | 105.2 |
| | | | | 64.5 |

PROCEDURE

At regular intervals of two weeks the pupils were given composite tests prepared by the instructor and based largely upon the text. These tests were mimeographed and of rather comprehensive extent. They were of four parts, true and false, single response, chronological, and multiple choice, weighted for grading 2-1-1-1 respectively. As noted on the table, three true and false tests were interspersed during the experiment and at the end of the semester the longer initial test was given again to the pupils, totalling for the experiment thirteen tests or a grand total of 780 test papers.

These two classes conducted by the same instructor were given the same collateral readings, the same oral reports, and the same map and chart work. The recitations were conducted along the same lines; question, answer, and discussion type. There was no attempt to make the large class a lecture class and in both classes there was an attempt to avoid special individual attention either to the poor or to the good students in order the better to preserve the equality and parity of instruction between the two sections. Above all the instruction was made as near a constant as possible.

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CONCLUSIONS

The scope of this experiment may not admit of dogmatic or definitive conclusions but nevertheless we venture these few suggestions:

1. The need of more statistical information for the verification of assertions. There does not seem to be a very extensive literature upon this subject as related to secondary-school education.
2. From an examination of these marks there clearly is no appreciable difference in the attainment of pupils in the large class with those in the small class. We rather believe that the large class, *ipso facto*, forces the student to a greater reliance upon himself and to less reliance upon the instructor.
3. We suggest that a more suited technique of instruction could be developed for large class instruction.
4. In a period of increasing school costs any plan proposing to decrease rising costs merits further study and experimentation from the administrative point of view. The results of this experiment seem to indicate one avenue toward decreasing the cost of instruction.

A Report on the Large Class in the Constitution Wichita High School East

*Reported by L. W. BROOKS, Director of Secondary Education, Wichita,
Kansas*

A large class in the Constitution was formed at the beginning of the second semester of the school year 1928-29. Ninety-three pupils, unselected, were actually in attendance during the term. This class was conducted in a lecture room which made for compactness, but rendered efficient study difficult.

The instructor had the invaluable aid of an assistant, a senior from Wichita University who was doing observation work. She kept the attendance, answered the phone, checked notebooks, graded papers, and recorded grades.

The text used in this course was **GOVERNMENT AND POLITICS IN THE UNITED STATES** by Guitteau, supplemented by Norton's **THE CONSTITUTION OF THE UNITED STATES**.

The course was outlined and copies of these outlines were put into the hands of the pupils as the work progressed. Each pupil was required to keep a notebook into which he placed the information called for in the outline. These were checked at intervals of about six weeks.

The class period was sixty minutes in length. Five to ten minutes at the beginning were devoted to the advanced assignment. About thirty-five minutes were spent in the consideration of the day's lesson. The general plan was an informal lecture from the instructor, interspersed with questions to the brighter and bolder pupils, with special emphasis placed upon those parts which were most difficult. The pupils were given opportunity to ask questions and these were submitted to the consideration of the class before being explained by the instructor.

Grades for the course were based largely upon written tests. These were given about once per week and consisted of mimeographed statements to be completed with a word or brief phrase. Due to the proximity of the pupils, it was necessary to make two sets of tests on separate sheets. These were passed out alternately to the thirteen rows, and when completed, they were passed in and the papers were then passed out again, but this time each pupil receiving the sheet which his neighbor had before. This scheme was appreciated by the pupils themselves and proved to be very satisfactory.

These tests were what might be called cumulative, that is, the pupils understood that each test would contain not only questions over recent work but questions taken from preceding tests. This was an incentive to check and correct mistakes when papers were returned.

The weekly tests were graded by the pupils. The papers were distributed and each pupil was required to write his own name on the paper which came into his possession. The answers were then

read by the instructor and the students advised how to determine the score. The distribution of papers was varied so that the same paper would not be received by the same pupil each time. This was a very satisfactory method of grading as it saved the instructor much clerical work giving more time for preparation and at the same time enabled the pupil to learn the correct answers to the questions.

Four times during the semester a general test, furnished by the Social Studies department, was given. This was largely objective and was graded by the instructor.

To facilitate the work, routine methods of gathering and distributing papers were developed and two pupils were trained to handle this phase of the procedure.

The Large Class versus The Small Class By The Laboratory Method

L. W. BROOKS, Director of Secondary Education, Wichita, Kansas

This is a description of a piece of experimental work that was conducted in the senior high school of Wichita, Kansas, during the school year of 1928-1929.

The study was made with two groups of the high junior class in English composition and grammar. Two classes of unselected pupils were paired for this experiment. No attempt was made to rate the pupils on their ability in composition or grammar, nor was any consideration taken of their previous work in English of any kind. The large class enrolled eighty; the small class enrolled twenty pupils.

Problem.—The object of this study was to determine whether or not the size of the class is a significant factor in teaching composition by the laboratory method.

The plan of the work.—The entire work of the semester was placed in the hands of the pupil at the beginning of the semester. The course consisted of eighty-five lessons each of which is divided into a *First Try* and a *Second Try*. If a pupil completed the *First Try* with no more than three minor errors, he was not required to take the *Second Try's*; in this way a premium was placed on accuracy in work. The teacher gave an explanation over a block of ten lessons; then each pupil worked at his own speed and checked his own lessons by self checking devices.

A pre-test in mechanics and grammar usage was given at the beginning of the term and the same test was given at the close of the term. An objective test on the daily work was given at the end of each block of ten lessons. *The Terman Group Test of Mental Ability for Grades 7 to 12* was given to determine what might be expected of each individual.

This test disclosed that the median of the large class was 141 points, and that of the small class was 154 points. Both groups were above the median of 138 points which is the median for eleventh grade pupils. The class periods were 55 minutes in length, and the classes met five times a week.

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The results were as follows:

Table I.

The Standing of the Large Class at the End of the First Term of Six Weeks.

| | | | | | | | |
|----------------------------------|----|----|----|----|----|----|----|
| No. of lessons completed | 30 | 27 | 24 | 22 | 20 | 18 | 15 |
| No. of pupils completing lessons | 41 | 3 | 6 | 6 | 9 | 2 | 4 |

The Standing of the Small Class at the End of the First Term of Six Weeks.

| | | | | | |
|----------------------------------|----|----|----|----|----|
| No. of lessons completed | 32 | 30 | 25 | 24 | 18 |
| No. of pupils completing lessons | 3 | 11 | 1 | 4 | 1 |

The reader will note that the range of lessons completed is about the same in both groups; in the large class sixty percent of the class had completed the required thirty lessons; in the small class seventy percent of the class completed the required thirty lessons. This fact, however, cannot be attributed to the size of the class since the Terman Group Test disclosed that the median of the small class was thirteen points higher than that of the large class.

Table II.

The Standing of the Large Class at the End of the Second Term.

| | | | | | | | | | | | | | | | |
|-----------------------------------|--------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| No. of lessons completed |58 | 58 | 56 | 55 | 54 | 53 | 52 | 51 | 50 | 50 | 47 | 43 | 37 | 25 | 20 |
| No. of pupils completing lessons. | 3 | 2 | 7 | 26 | 3 | 10 | 3 | 2 | 2 | 2 | 2 | 1 | 6 | 1 | 1 |

The Standing of the Small Class at the End of the Second Term.

| | | | | | | | | |
|----------------------------------|---------|----|----|----|----|----|----|----|
| No. of lessons completed |55 | 54 | 53 | 52 | 51 | 50 | 48 | 46 |
| No. of pupils completing lessons |7 | 4 | 3 | 2 | 1 | 1 | 1 | 1 |

The second table shows that the range is approximately the same with perhaps more work done by the large class. The block of work to be completed included fifty-five lessons; thirty-eight of the pupils, or fifty percent, had completed that much or more in the large class; in the small class only thirty-five percent of the class had completed the assigned amount, and none had gone beyond that amount.

At the end of the semester four more pupils had withdrawn from the large class leaving then only sixty-seven pupils; in the small class there were still twenty pupils. In the large class, fifty-four or eighty percent completed the work with passing grades, and thirteen pupils, or twenty percent failed. The scores made in the Terman Group Test show that out of the thirteen who failed in the large class seven had scores below the median for eleventh year pupils; in the small class the one pupil who failed had a score in the Terman Test 30 points below the median for eleventh grade pupils.

SECONDARY-SCHOOL STUDIES

The small class had ten percent of *A* grades, while the large class had only six percent of *A* grades; but again this cannot be attributed to the size of the class since the median was higher in the small class.

The writer draws the general conclusion that mental ability being somewhat on the same level, a class of seventy-five or eighty can be as successfully handled by the laboratory plan of instruction as can a class of twenty.

SUBJECT FAILURES BY SCHOOLS FOR SEMESTER ENDING, JUNE, 1929

This report was made to the Judd Club, December 10, 1929, on Subject Failures for the Semester Ending, June, 1929.

| School | 1* | 2* | 3* | 4* | 5* | 6* | 7* |
|--------|-------|------|------|------|------|------|------|
| A | 3815 | 292 | 121 | 125 | 7.6 | 10.8 | 14.1 |
| B | 2180 | 180 | 44 | 38 | 8.2 | 10.2 | 12.0 |
| C | 1017 | 23 | 15 | 17 | 2.3 | 3.7 | 5.4 |
| D | 3978 | 355 | 176 | 316 | 8.9 | 13.3 | 21.2 |
| E | 1357 | 123 | 37 | 56 | 9.1 | 11.7 | 15.9 |
| F | 5338 | 243 | 101 | 163 | 4.5 | 6.2 | 9.5 |
| G | 12106 | 1344 | 497 | 689 | 11.1 | 15.2 | 20.8 |
| H | 947 | 99 | 53 | 25 | 10.5 | 16.0 | 18.7 |
| I | 2177 | 189 | 32 | 30 | 8.6 | 10.1 | 11.5 |
| J | 6121 | 340 | 140 | 321 | 5.6 | 7.8 | 13.1 |
| K | 4426 | 264 | 43 | 63 | 5.9 | 6.9 | 8.3 |
| L | 1358 | 123 | 37 | 61 | 9.0 | 11.7 | 16.2 |
| M | 18975 | 539 | 400 | 855 | 2.8 | 4.9 | 9.4 |
| N | 6592 | 395 | 125 | 105 | 6.0 | 7.9 | 9.5 |
| O | 9804 | 987 | 290 | 210 | 10.0 | 13.0 | 15.1 |
| P | 4745 | 193 | 34 | 96 | 4.1 | 4.8 | 6.8 |
| Q | 2111 | 27 | 7 | 10 | 1.3 | 1.6 | 2.0 |
| R | 846 | 28 | 17 | 16 | 3.3 | 5.3 | 7.2 |
| S | 3063 | 146 | 51 | 111 | 3.2 | 4.2 | 8.5 |
| Total | 90956 | 5890 | 2183 | 3307 | 6.5 | 8.8 | 12.5 |

- *1. Column 1—Total subject enrolments for semester by schools.
- 2. Column 2—Total number of subject failures enrolled at end of semester.
- 3. Column 3—Number of pupils withdrawn during semester who were failing at time of withdrawal.
- 4. Column 4—Number of pupils withdrawn during semester who were passing at time of withdrawal.
- 5. Column 5—Percentage of pupils having subject failures for semester.
- 6. Column 6—Percentage of subject failures and withdrawals failing at time of withdrawal.
- 7. Column 7—Percentage of subject failures and withdrawals.

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SUBJECT FAILURES OF SENIOR CLASSES

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|------|-----|-----|-----|-----|-----|------|
| B | 384 | 5 | 1 | 0 | 1.3 | 1.6 | 1.6 |
| C | 271 | 3 | 2 | 2 | 1.1 | 1.8 | 2.5 |
| E | 144 | 7 | 4 | 10 | 4.2 | 7.6 | 14.6 |
| F | 868 | 10 | 9 | 18 | 1.2 | 2.2 | 4.3 |
| G | 1430 | 72 | 46 | 71 | 5.0 | 8.3 | 13.2 |
| H | 57 | 2 | 0 | 2 | 3.5 | 3.5 | 7.0 |
| J | 734 | 22 | 22 | 21 | 3.0 | 6.0 | 9.0 |
| N | 811 | 11 | 8 | 5 | 1.4 | 2.3 | 3.0 |
| O | 1555 | 76 | 36 | 22 | 4.9 | 7.2 | 8.6 |
| P | 473 | 11 | 1 | 2 | 0.2 | 0.4 | 0.8 |
| Q | 415 | 2 | 0 | 0 | 0.4 | 0.4 | 0.4 |
| R | 160 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 240 | 0 | 5 | 5 | 0 | 1.1 | 4.4 |
| Total | 7542 | 214 | 134 | 158 | 2.8 | 4.6 | 6.7 |

SUBJECT FAILURES OF JUNIOR CLASSES

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|-------|-----|-----|-----|------|------|------|
| B | 384 | 36 | 9 | 7 | 9.4 | 11.7 | 13.5 |
| C | 270 | 11 | 7 | 10 | 4.1 | 6.7 | 10.0 |
| E | 177 | 9 | 0 | 6 | 5.1 | 5.1 | 8.5 |
| F | 1353 | 66 | 31 | 42 | 4.9 | 7.2 | 10.3 |
| G | 2593 | 311 | 102 | 99 | 12.0 | 15.9 | 19.7 |
| H | 231 | 27 | 18 | 7 | 11.7 | 19.5 | 22.5 |
| J | 1227 | 70 | 13 | 69 | 5.5 | 6.8 | 12.4 |
| N | 1867 | 101 | 23 | 28 | 5.4 | 6.6 | 8.1 |
| O | 1248 | 68 | 34 | 36 | 5.4 | 8.2 | 11.1 |
| P | 961 | 32 | 6 | 19 | 3.3 | 4.0 | 5.9 |
| Q | 461 | 6 | 4 | 4 | 1.3 | 2.1 | 3.0 |
| R | 176 | 7 | 2 | 2 | 3.9 | 5.1 | 6.3 |
| S | 615 | 18 | 3 | 26 | 2.5 | 2.9 | 6.7 |
| Total | 11563 | 762 | 252 | 355 | 6.6 | 8.7 | 11.9 |

SUBJECT FAILURES OF SOPHOMORE CLASSES

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|-------|------|-----|-----|------|------|------|
| B | 728 | 46 | 23 | 20 | 6.3 | 9.5 | 12.2 |
| C | 235 | 6 | 5 | 5 | 2.6 | 4.7 | 6.8 |
| E | 446 | 44 | 6 | 14 | 9.8 | 11.2 | 14.3 |
| F | 1527 | 92 | 41 | 43 | 6.0 | 8.7 | 11.5 |
| G | 3190 | 409 | 181 | 200 | 12.8 | 18.5 | 24.8 |
| H | 326 | 35 | 9 | 8 | 10.8 | 13.5 | 15.9 |
| J | 1611 | 102 | 37 | 99 | 6.3 | 8.6 | 14.7 |
| N | 2014 | 152 | 48 | 29 | 7.5 | 9.9 | 11.4 |
| O | 2900 | 394 | 94 | 66 | 13.5 | 16.8 | 19.1 |
| P | 1279 | 43 | 9 | 295 | 3.4 | 4.1 | 6.4 |
| Q | 554 | 3 | 2 | 5 | 0.5 | 0.9 | 1.8 |
| R | 231 | 7 | 0 | 3 | 3.0 | 3.0 | 4.3 |
| S | 655 | 43 | 7 | 17 | 5.1 | 7.0 | 12.5 |
| Total | 15696 | 1376 | 462 | 804 | 8.8 | 11.7 | 16.8 |

SECONDARY-SCHOOL STUDIES

SUBJECT FAILURES OF FRESHMAN CLASSES

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|-------|------|-----|-----|------|------|------|
| B | 684 | 93 | 11 | 11 | 13.5 | 15.2 | 16.8 |
| C | 241 | 3 | 1 | 0 | 1.2 | 1.7 | 1.7 |
| E | 590 | 63 | 27 | 31 | 10.1 | 15.3 | 20.5 |
| F | 1735 | 86 | 31 | 64 | 4.9 | 6.7 | 10.4 |
| G | 4893 | 552 | 168 | 319 | 11.3 | 14.7 | 21.2 |
| H | 333 | 35 | 26 | 8 | 10.5 | 18.3 | 20.7 |
| J | 2254 | 146 | 68 | 114 | 6.5 | 9.4 | 14.5 |
| N | 1900 | 131 | 46 | 43 | 6.8 | 9.3 | 11.5 |
| O | 4101 | 449 | 126 | 86 | 10.9 | 14.0 | 16.1 |
| P | 2032 | 117 | 18 | 45 | 5.8 | 6.7 | 8.9 |
| Q | 681 | 16 | 1 | 1 | 2.3 | 2.5 | 2.6 |
| R | 279 | 14 | 15 | 11 | 5.0 | 10.4 | 14.3 |
| S | 1001 | 77 | 25 | 37 | 8.1 | 9.7 | 12.6 |
| Total | 20724 | 1782 | 563 | 770 | 8.6 | 11.3 | 15.0 |

SUBJECT FAILURES OF ENGLISH DEPARTMENTS

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|-------|------|-----|-----|------|------|------|
| A | 1029 | 67 | 33 | 32 | 6.5 | 9.7 | 12.8 |
| B | 597 | 54 | 12 | 9 | 9.0 | 11.1 | 12.6 |
| C | 241 | 2 | 2 | 5 | 1.2 | 1.7 | 3.7 |
| D | 899 | 97 | 49 | 63 | 11.1 | 16.6 | 23.3 |
| E | 340 | 20 | 15 | 14 | 5.8 | 10.2 | 14.4 |
| F | 1192 | 63 | 29 | 39 | 5.3 | 7.7 | 10.9 |
| G | 2259 | 212 | 89 | 117 | 9.4 | 13.3 | 18.5 |
| H | 877 | 72 | 17 | 16 | 8.2 | 10.1 | 12.0 |
| I | 577 | 97 | 13 | 4 | 16.8 | 19.0 | 19.7 |
| J | 1319 | 85 | 20 | 55 | 6.4 | 8.0 | 12.1 |
| K | 986 | 77 | 9 | 15 | 7.8 | 8.7 | 10.2 |
| L | 349 | 20 | 15 | 14 | 5.7 | 10.0 | 14.0 |
| M | 4320 | 254 | 121 | 158 | 5.9 | 8.7 | 12.3 |
| N | 1494 | 69 | 19 | 21 | 4.6 | 5.9 | 7.3 |
| O | 3027 | 276 | 76 | 66 | 9.1 | 11.6 | 13.8 |
| P | 974 | 53 | 3 | 17 | 5.4 | 5.7 | 7.5 |
| Q | 438 | 4 | 3 | 1 | 0.9 | 1.1 | 1.8 |
| R | 214 | 7 | 4 | 3 | 3.3 | 5.1 | 6.5 |
| S | 578 | 27 | 11 | 19 | 3.1 | 4.8 | 7.3 |
| T | 369 | 37 | 15 | 12 | 10.0 | 14.0 | 17.3 |
| V | 484 | 63 | 5 | 9 | 13.0 | 14.0 | 15.9 |
| W | 383 | 20 | 20 | 18 | 5.2 | 10.4 | 15.1 |
| Total | 23245 | 1689 | 605 | 707 | 7.3 | 9.9 | 12.9 |

DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

**SUBJECT FAILURES OF SOCIAL SCIENCE
DEPARTMENTS**

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|-------|-----|-----|-----|------|------|------|
| A | 379 | 34 | 8 | 8 | 8.9 | 11.0 | 13.1 |
| B | 493 | 33 | 8 | 7 | 6.7 | 8.5 | 9.7 |
| C | 164 | 12 | 6 | 4 | 7.3 | 11.0 | 13.4 |
| D | 472 | 20 | 13 | 30 | 4.0 | 7.0 | 13.0 |
| E | 1430 | 14 | 12 | 15 | 3.2 | 6.0 | 9.5 |
| F | 685 | 21 | 4 | 13 | 3.0 | 3.6 | 5.5 |
| G | 1635 | 205 | 70 | 70 | 12.5 | 16.8 | 21.1 |
| H | 739 | 64 | 14 | 8 | 8.7 | 10.6 | 11.6 |
| I | 373 | 22 | 2 | 1 | 5.9 | 6.4 | 6.7 |
| J | 1114 | 69 | 33 | 57 | 6.2 | 9.2 | 14.3 |
| K | 618 | 21 | 9 | 16 | 3.3 | 4.8 | 7.4 |
| L | 383 | 13 | 11 | 14 | 3.3 | 6.2 | 9.9 |
| M | 4521 | 81 | 102 | 251 | 1.8 | 4.0 | 9.6 |
| N | 1074 | 82 | 27 | 21 | 7.6 | 10.1 | 12.1 |
| O | 1767 | 154 | 68 | 38 | 8.7 | 12.5 | 14.7 |
| P | 425 | 2 | 0 | 15 | 0.5 | 0.5 | 4.0 |
| Q | 339 | 4 | 2 | 2 | 1.2 | 1.7 | 2.3 |
| R | 152 | 4 | 1 | 0 | 2.6 | 3.3 | 3.3 |
| S | 217 | 7 | 6 | 4 | 4.1 | 7.7 | 9.9 |
| Total | 15984 | 862 | 396 | 574 | 5.4 | 7.9 | 11.4 |

**SUBJECT FAILURES OF MATHEMATICS
DEPARTMENTS**

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|-------|------|-----|-----|------|------|------|
| A | 465 | 42 | 11 | 13 | 9.0 | 11.3 | 14.1 |
| B | 292 | 25 | 9 | 4 | 8.5 | 11.6 | 13.0 |
| C | 121 | 5 | 3 | 3 | 4.1 | 6.6 | 9.1 |
| D | 653 | 78 | 37 | 45 | 1.2 | 1.8 | 2.5 |
| E | 290 | 75 | 5 | 18 | 25.8 | 27.5 | 33.7 |
| F | 690 | 51 | 20 | 16 | 7.3 | 10.2 | 12.6 |
| G | 2039 | 297 | 102 | 85 | 14.6 | 19.6 | 23.7 |
| H | 512 | 44 | 9 | 7 | 8.6 | 10.4 | 11.7 |
| I | 342 | 41 | 5 | 7 | 12.0 | 13.8 | 15.5 |
| J | 580 | 39 | 16 | 36 | 6.7 | 9.5 | 15.7 |
| K | 669 | 47 | 6 | 8 | 7.0 | 7.9 | 9.1 |
| L | 260 | 64 | 5 | 16 | 24.6 | 26.5 | 32.6 |
| M | 1279 | 42 | 34 | 49 | 3.3 | 5.9 | 9.8 |
| N | 1177 | 102 | 32 | 18 | 8.7 | 11.4 | 12.9 |
| O | 2055 | 317 | 84 | 49 | 15.5 | 19.6 | 21.9 |
| P | 371 | 43 | 5 | 9 | 11.6 | 12.9 | 15.4 |
| Q | 319 | 3 | 1 | 4 | 0.9 | 1.2 | 2.5 |
| R | 128 | 3 | 4 | 6 | 2.3 | 5.4 | 10.2 |
| S | 413 | 33 | 9 | 11 | 6.1 | 7.2 | 8.9 |
| Total | 12655 | 1351 | 397 | 404 | 10.6 | 13.8 | 17.0 |

SECONDARY-SCHOOL STUDIES

**SUBJECT FAILURES OF FOREIGN LANGUAGE
DEPARTMENTS**

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|-------|------|-----|-----|------|------|------|
| A | 613 | 64 | 19 | 6 | 10.4 | 13.5 | 14.5 |
| B | 313 | 21 | 6 | 1 | 6.7 | 8.9 | 9.3 |
| C | 77 | 1 | 0 | 0 | 1.3 | 1.3 | 1.3 |
| D | 310 | 29 | 9 | 24 | 0.9 | 1.2 | 2.0 |
| E | 56 | 8 | 2 | 3 | 14.2 | 17.8 | 23.2 |
| F | 445 | 26 | 8 | 7 | 5.8 | 7.6 | 9.2 |
| G | 2474 | 296 | 108 | 97 | 11.9 | 16.3 | 20.2 |
| H | 326 | 31 | 2 | 4 | 9.5 | 10.1 | 11.1 |
| I | 455 | 58 | 4 | 5 | 13.0 | 13.9 | 14.7 |
| J | 423 | 34 | 27 | 25 | 8.0 | 14.4 | 20.3 |
| K | 617 | 63 | 5 | 6 | 10.2 | 11.0 | 12.0 |
| L | 56 | 8 | 2 | 3 | 14.3 | 17.9 | 23.2 |
| M | 1337 | 21 | 28 | 41 | 1.6 | 3.7 | 6.7 |
| N | 1365 | 98 | 26 | 15 | 7.1 | 9.0 | 10.1 |
| O | 2025 | 193 | 41 | 28 | 9.5 | 11.5 | 12.1 |
| P | 488 | 33 | 2 | 1 | 6.8 | 7.2 | 7.4 |
| Q | 411 | 15 | 1 | 1 | 3.6 | 3.9 | 4.1 |
| R | 74 | 2 | 2 | 1 | 2.7 | 5.4 | 6.8 |
| S | 453 | 40 | 8 | 7 | 6.0 | 7.2 | 8.1 |
| Total | 12318 | 1041 | 300 | 275 | 8.4 | 10.8 | 13.1 |

SUBJECT FAILURES OF SCIENCE DEPARTMENTS

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|-------|-----|-----|-----|------|------|------|
| A | 343 | 24 | 11 | 11 | 7.0 | 10.0 | 15.0 |
| B | 168 | 15 | 1 | 0 | 8.9 | 9.5 | 9.5 |
| C | 170 | 2 | 4 | 4 | 1.2 | 3.5 | 5.9 |
| D | 397 | 38 | 30 | 28 | 0.9 | 1.7 | 2.4 |
| E | 214 | 5 | 1 | 10 | 2.3 | 2.8 | 7.8 |
| F | 866 | 29 | 15 | 23 | | | |
| G | 1322 | 139 | 50 | 62 | 10.5 | 14.3 | 19.0 |
| H | 202 | 19 | 5 | 2 | 9.4 | 11.9 | 12.9 |
| I | 369 | 19 | 8 | 3 | 5.1 | 7.3 | 8.1 |
| J | 529 | 29 | 15 | 16 | 5.5 | 8.3 | 11.3 |
| K | 483 | 24 | 5 | 5 | 5.0 | 6.0 | 7.0 |
| L | 218 | 6 | 1 | 10 | 2.8 | 3.2 | 7.8 |
| M | 2225 | 40 | 60 | 90 | 1.8 | 4.5 | 8.5 |
| N | 572 | 17 | 10 | 7 | 3.0 | 4.7 | 5.9 |
| O | 1545 | 86 | 32 | 33 | 5.5 | 7.7 | 9.9 |
| P | 790 | 35 | 2 | 16 | 4.4 | 4.7 | 6.7 |
| Q | 325 | 1 | 0 | 0 | 0.3 | 0.3 | 0.3 |
| R | 120 | 4 | 5 | 4 | 3.3 | 7.5 | 10.8 |
| S | 407 | 13 | 4 | 14 | 2.9 | 3.3 | 5.0 |
| Total | 11265 | 545 | 259 | 338 | 4.8 | 7.1 | 10.1 |

DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

**SUBJECT FAILURES OF MODERN LANGUAGE
DEPARTMENTS**

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|------|-----|-----|-----|------|------|------|
| A | 384 | 43 | 13 | 6 | 11.1 | 14.5 | 16.1 |
| B | 144 | 2 | 3 | 1 | 1.4 | 3.4 | 4.1 |
| C | 37 | 0 | 0 | 0 | 0 | 0 | 0 |
| D | 119 | 10 | 7 | 9 | 8.4 | 14.2 | 21.8 |
| E | 56 | 8 | 2 | 3 | 14.2 | 17.8 | 23.2 |
| F | 193 | 6 | 3 | 4 | 3.1 | 4.6 | 6.7 |
| G | 1297 | 148 | 66 | 65 | 11.4 | 16.5 | 21.5 |
| H | 82 | 5 | 0 | 1 | 6.0 | 6.0 | 7.3 |
| I | 171 | 22 | 2 | 4 | 12.9 | 14.0 | 17.0 |
| J | 187 | 7 | 12 | 11 | 3.7 | 10.1 | 16.0 |
| K | 235 | 19 | 2 | 2 | 8.0 | 8.9 | 9.7 |
| L | 56 | 8 | 2 | 3 | 14.3 | 17.9 | 23.2 |
| M | 802 | 10 | 10 | 35 | 1.2 | 2.4 | 6.8 |
| N | 807 | 68 | 19 | 7 | 8.4 | 10.7 | 11.6 |
| O | 896 | 86 | 25 | 15 | 9.5 | 12.3 | 14.0 |
| P | 292 | 33 | 3 | 1 | 11.3 | 12.3 | 12.6 |
| Q | 219 | 6 | 1 | 1 | 2.7 | 3.1 | 3.6 |
| R | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 277 | 23 | 8 | 7 | 8.3 | 11.1 | 13.7 |
| Total | 6261 | 504 | 179 | 175 | 8.0 | 10.9 | 13.7 |

**SUBJECT FAILURES OF LATIN (ANC. LANG.)
DEPARTMENTS**

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|------|-----|-----|-----|------|------|------|
| A | 229 | 21 | 6 | 0 | 9.1 | 11.8 | 11.8 |
| B | 169 | 19 | 3 | 0 | 11.2 | 13.0 | 13.0 |
| C | 40 | 1 | 0 | 0 | 2.5 | 2.5 | 2.5 |
| D | 191 | 19 | 2 | 15 | 9.9 | 10.9 | 18.8 |
| F | 252 | 20 | 5 | 3 | 7.9 | 9.9 | 11.1 |
| G | 1177 | 148 | 42 | 32 | 12.6 | 16.1 | 18.9 |
| H | 244 | 26 | 2 | 3 | 10.7 | 11.5 | 12.7 |
| I | 284 | 36 | 2 | 1 | 12.7 | 13.4 | 13.8 |
| J | 236 | 27 | 15 | 14 | 11.4 | 17.7 | 23.7 |
| K | 382 | 44 | 3 | 4 | 11.5 | 12.3 | 13.3 |
| M | 535 | 11 | 18 | 6 | 2.0 | 5.4 | 6.4 |
| N | 558 | 30 | 7 | 8 | 5.4 | 6.6 | 8.1 |
| O | 1089 | 107 | 16 | 13 | 9.8 | 11.3 | 12.5 |
| P | 196 | 0 | 0 | 0 | 0 | 0 | 0 |
| Q | 192 | 9 | 0 | 0 | 4.7 | 4.7 | 4.7 |
| R | 57 | 2 | 2 | 1 | 3.5 | 7.0 | 8.7 |
| S | 176 | 17 | 0 | 0 | 6.7 | 6.7 | 6.7 |
| Total | 6007 | 537 | 123 | 100 | 8.9 | 10.9 | 12.6 |

SECONDARY-SCHOOL STUDIES

**SUBJECT FAILURES OF MANUAL ARTS
DEPARTMENTS**

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|------|-----|----|-----|-----|------|------|
| A | 215 | 17 | 5 | 10 | 7.9 | 10.2 | 14.8 |
| B | 32 | 0 | 0 | 4 | 0 | 0 | 12.5 |
| C | 56 | 0 | 0 | 2 | 0 | 0 | 3.6 |
| D | 328 | 27 | 10 | 23 | 0.8 | 1.1 | 1.8 |
| F | 359 | 5 | 5 | 17 | 1.4 | 2.8 | 7.1 |
| G | 1074 | 84 | 31 | 81 | 7.8 | 10.7 | 18.2 |
| I | 178 | 10 | 1 | 4 | 5.6 | 6.1 | 8.5 |
| K | 193 | 7 | 3 | 4 | 3.6 | 5.1 | 7.2 |
| M | 1419 | 23 | 14 | 80 | 1.6 | 2.6 | 8.2 |
| N | 226 | 6 | 4 | 10 | 2.7 | 4.4 | 8.8 |
| O | 693 | 19 | 11 | 14 | 2.7 | 4.3 | 6.3 |
| P | 628 | 9 | 11 | 5 | 1.4 | 3.2 | 4.0 |
| Q | 107 | 0 | 0 | 2 | 1.9 | 1.9 | 1.9 |
| R | 38 | 1 | 0 | 1 | 2.6 | 2.6 | 5.2 |
| S | 82 | 5 | 1 | 3 | 5.1 | 7.6 | 19.2 |
| Total | 5628 | 213 | 96 | 260 | 3.7 | 5.4 | 10.1 |

**SUBJECT FAILURES OF HOME ECONOMICS
DEPARTMENTS**

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|------|----|----|----|------|------|------|
| A | 95 | 2 | 0 | 9 | 1.9 | 1.9 | 11.5 |
| B | 34 | 4 | 0 | 1 | 11.7 | 11.7 | 14.7 |
| C | 40 | 0 | 0 | 1 | 2.5 | 2.5 | 2.5 |
| D | 91 | 9 | 2 | 8 | 9.9 | 12.1 | 20.9 |
| F | 210 | 2 | 1 | 7 | 1.0 | 1.5 | 3.8 |
| I | 39 | 5 | 1 | 2 | 12.8 | 15.3 | 20.5 |
| J | 152 | 4 | 1 | 4 | 2.6 | 3.3 | 5.9 |
| K | 196 | 8 | 1 | 2 | 4.1 | 4.6 | 5.6 |
| M | 340 | 1 | 3 | 13 | 0.3 | 1.2 | 5.0 |
| N | 192 | 5 | 1 | 2 | 2.6 | 3.1 | 4.2 |
| O | 304 | 8 | 5 | 10 | 2.6 | 4.2 | 7.6 |
| P | 112 | 4 | 0 | 2 | 4.0 | 4.5 | 6.7 |
| Q | 49 | 0 | 0 | 0 | 0 | 0 | 0 |
| R | 25 | 2 | 0 | 0 | 8.0 | 8.0 | 8.0 |
| S | 63 | 0 | 0 | 4 | 0 | 0 | 3.0 |
| Total | 1942 | 54 | 15 | 65 | 2.8 | 3.5 | 6.7 |

DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

**SUBJECT FAILURES OF COMMERCIAL
DEPARTMENTS**

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|-------|-----|-----|-----|------|------|------|
| A | 686 | 42 | 34 | 35 | 6.1 | 11.0 | 16.1 |
| B | 393 | 38 | 9 | 12 | 9.7 | 12.0 | 15.0 |
| C | 148 | 1 | 0 | 0 | 0.07 | 0.07 | 0.07 |
| D | 690 | 47 | 24 | 81 | 0.6 | 1.0 | 2.2 |
| E | 70 | 11 | 3 | 4 | 15.7 | 20.0 | 25.7 |
| F | 790 | 45 | 20 | 39 | 5.7 | 8.2 | 13.1 |
| G | 1197 | 107 | 46 | 168 | 8.9 | 12.8 | 26.8 |
| H | 501 | 66 | 7 | 10 | 13.1 | 14.5 | 16.5 |
| I | 73 | 10 | 3 | 5 | 13.7 | 17.8 | 24.7 |
| J | 691 | 43 | 15 | 44 | 6.2 | 8.4 | 14.8 |
| K | 366 | 18 | 5 | 6 | 4.9 | 6.2 | 7.9 |
| L | 91 | 11 | 3 | 4 | 12.0 | 15.3 | 19.7 |
| M | 3302 | 74 | 129 | 158 | 2.2 | 6.1 | 10.9 |
| N | 392 | 15 | 5 | 9 | 3.8 | 5.1 | 7.4 |
| O | 646 | 54 | 20 | 26 | 8.3 | 11.4 | 15.4 |
| P | 611 | 8 | 10 | 27 | 1.3 | 2.9 | 7.4 |
| R | 95 | 5 | 1 | 1 | 5.3 | 6.3 | 7.4 |
| S | 280 | 13 | 1 | 23 | 4.2 | 4.5 | 15.0 |
| W | 101 | 3 | 8 | 3 | 3.0 | 10.9 | 13.9 |
| Total | 11123 | 611 | 343 | 655 | 5.5 | 8.6 | 14.5 |

SUBJECT FAILURES OF ART DEPARTMENTS

| School | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------|------|----|----|----|-----|-----|------|
| D | 60 | 9 | 2 | 8 | 1.5 | 1.8 | 3.2 |
| F | 94 | 1 | 0 | 2 | 0.9 | 0.9 | 2.8 |
| G | 432 | 12 | 5 | 30 | 2.8 | 3.9 | 10.9 |
| I | 92 | 2 | 0 | 1 | 1.8 | 1.8 | 2.8 |
| J | 70 | 0 | 4 | 2 | 0 | 5.7 | 8.6 |
| K | 123 | 0 | 0 | 1 | 0 | 0 | 0.8 |
| M | 232 | 3 | 9 | 15 | 1.3 | 5.2 | 11.6 |
| N | 100 | 1 | 1 | 2 | 1.0 | 2.0 | 4.0 |
| O | 362 | 0 | 3 | 9 | 0 | 0.8 | 3.6 |
| P | 162 | 0 | 0 | 3 | 0 | 0 | 2.2 |
| Q | 70 | 0 | 0 | 0 | 0 | 0 | 0 |
| S | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1915 | 31 | 27 | 74 | 1.6 | 3.0 | 6.9 |

I. Bibliography on Relative Efficiency of Classes of Different Sizes

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National Survey of Secondary Education

The Consulting Committee on the National Survey of Secondary Education met November 25th at 10 a. m., in the office of the Commissioner of Education, Department of the Interior, Washington D. C. The members present were: Church, Cubberley, Edmonson, Judd, Koos, Mann, Meredith, Norton, and Roemer. Dr. Jesse Newlon served as alternate for Dr. Russell, who could not attend. Commissioner Cooper is the director of the survey; Dr. Koos is the associate director.

By vote the committee made the following recommendations:

1. That primary investigations be conducted in the following fields:
 - Organization of secondary schools.
 - Student personnel problems.
 - Administrative and supervisory problems in secondary education.
 - Administrative and supervisory staff.
 - Curriculum activities.
 - Extra-Curriculum activities.

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2. That no primary major investigations be organized in the following fields.

Historical development of secondary education.
Objectives.

School housing.
Teaching staff.
Financial aspects.

These eliminations were made primarily because of financial limitations of the survey.

3. That no detailed study of foreign school systems be undertaken.

4. That the Commissioner of Education appoint a committee of persons not engaged in education but representative of views of the citizenry regarding education. Representation of organizations such as the American Federation of Labor, the U. S. Chamber of Commerce, the National Grange, and service clubs such as Rotary, Kiwanis, and Lions was mentioned. Emphasis was placed upon the necessity for making this committee truly representative of the lay attitude. The committee thus selected would have presented before it and would pass upon non-technical (primarily organizational) aspects of education uncovered in the survey.

5. That the regional associations be requested to co-operate in the survey projects to be initiated.

6. That reactions regarding important and feasible investigations in the curriculum and in extra-curriculum activities be secured from experts in these two fields.

7. That it be a major function of the survey to develop in detail the procedures and techniques for appraising secondary-school procedures which may be used:

- a. To enlist the effective co-operation of outside agencies in conducting the survey.
- b. To furnish examples of effective inquiry which may be applied locally after this survey is completed.

Although no vote was taken members of the committee appeared to be in general agreement on the following items:

1. Having the survey findings consist not primarily in a summary statement of averages but rather in a live presentation of material pertinent to progress and improvement in secondary education. To this end specific illustrations and clear-cut descriptions of progressive practices were thought of as more significant than elaborate statistical summaries.

2. Inclusion of only certain aspects of private education. Those specifically mentioned for inclusion were the relative extent of private secondary education, significant innovation in private schools, and situations in which private schools were utilized also as agencies of public education.

3. Treatment of vocational education in connection with the major investigations on organization and curriculum.

4. Recognition of the problem of the small high school throughout all the major problems investigated.

5. Desirability of studying the secondary-school population not registered in school as well as that portion of it which is in school.
6. Existence of opportunity for supplementing the survey investigations by stimulating organized coöperation among State educational systems in studying specific problems common to two or more States. This principle of coöperative study could be applied, as well, to city school systems and to individual schools.
7. Practicability of conducting a few experiments on a coöperative basis. This would involve enlisting a number of schools to conduct the same experiment in the same way, thus making comparable the results secured.
8. Advisability of thoroughly canvassing studies already available in the fields of the several major investigations in order that duplication of effort may be avoided.

Book Notices of Accessions

Genevieve Darlington

Paynter, Richard H. and Blanchard, Phyllis. *A Study of Educational Achievement of Problem Children*. New York: The Commonwealth Fund Division of Publications, 1929. Pp. 72. \$1.00.

The study is based upon data taken from the case records of the demonstration child guidance clinics in Los Angeles and Philadelphia. The authors were psychologists on the staffs of the clinics.

Galland, Joseph S. and Du Gord, Armand E. *Progressive French Reader*. New York: Macmillan Co., 1929. Pp. 210. \$.80.

This graded material, by two members of the Romance Department of Northwestern University, is divided into three parts: I. Sketches dealing with French family life; II. Five short stories; III. Twenty-five composition and conversation exercises based on parts I and II.

Browning, Robert. *Shorter Poems*. Ed. by Franklin T. Baker, rev. by H. Y. Moffett, illus. by Harry Townsend. New York: Macmillan Co., 1929. Pp. 364. \$.60. New Pocket Classics.

Longfellow, Henry Wadsworth. *The Courtship of Miles Standish and Minor Poems*. Ed. by Will David Howe, rev. by H. Y. Moffett, illus. by Curtiss Sprague. Pp. 247. With this: Lowell, James Russell. *The Vision of Sir Launfal and Other Poems*. Ed. by Herbert Bates, rev. by H. Y. Moffett, illus. by Curtiss Sprague. New York: Macmillan Co., 1929. P. 115. \$.60. New Pocket Classics. Bound together.

Coleridge, Samuel Taylor. *The Ancient Mariner; Kubla Khan; Christabel*. Ed. by Tuley F. Huntington, rev. by H. Y. Moffett, illus. by A. Gladys Peck. Pp. 103. With this: Arnold, Matthew. *Sohrab and Rustem, and Other Poems*. Ed. by Justus C. Castleman, rev. by H. Y. Moffett, illus. by A. Gladys Peck. New York: Macmillan Co., 1929. Pp. 215. New Pocket Classics. \$.60. Bound together.

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The Bible. Selections from the Old Testament. Ed. by Fred Newton Scott, rev. by H. Y. Moffett, illus. by Norman Roberts. New York: Macmillan Co., 1929. Pp. 343. \$60. New Pocket Classics.

Eliot, George. *Silas Marner.* Ed. by Edward L. Gulick, rev. by H. Y. Moffett, illus. by Clarence Rowe. New York: Macmillan Co., 1929. Pp. 348. \$60. New Pocket Classics.

Irving, Washington. *The Sketch Book.* Rev. by H. Y. Moffett, illus. by Curtiss Sprague. New York: Macmillan Co., 1929. Pp. 487. \$60. New Pocket Classics.

Longfellow, Henry Wadsworth. *Evangeline.* Ed. by Lewis B. Semple, rev. by H. Y. Moffett, illus. by John A. Haelen. Pp. 121. With this: Whittier, John Greenleaf. *Snow Bound and Other Early Poems.* Ed. by Archibald L. Bouton, rev. by H. Y. Moffett, illus. by John A. Haelen. New York: Macmillan Co., pp. 223. \$60. New Pocket Classics. Bound together.

Stevenson, Robert Louis. *Treasure Island.* Ed. by Hiram Albert Vance, rev. by H. Y. Moffett, illus. by Warwick Goble. New York: Macmillan Co., 1929. Pp. 356. \$60. New Pocket Classics.

Scott, Sir Walter. *The Lady of the Lake.* Ed. by Elizabeth A. Packard, rev. by H. Y. Moffett, illus. by A. Gladys Peck. Pp. 235. With this: *The Lay of the Last Minstrel.* New York: Macmillan Co., 1929. Pp. 169. \$60. New Pocket Classics. Bound Together.

Shakespeare, William. *Julius Caesar.* Ed. by George W. and Lois G. Hufford, rev. by H. Y. Moffett, illus. by John A. Gincano. Pp. 166. With this: *As You Like It.* Ed. by Charles R. Gaston, rev. by H. Y. Moffett, illus. by John A. Gincano. New York: Macmillan Co., 1929. Pp. 176. \$60. New Pocket Classics. Bound together.

Shakespeare, William. *The Merchant of Venice.* Ed. by C. W. Underwood, rev. by H. Y. Moffett, illus. by G. M. Richards. Pp. 185. With this: *A Midsummer Night's Dream.* Ed. by Ernest Clapp Noyes, rev. by H. Y. Moffett, illus. by G. M. Richards. New York: Macmillan Co., 1929. Pp. 139. \$60. New Pocket Classics. Bound together.

These New Pocket Classics, intended for the young student, are attractively bound in bright red fabrikoid. They are provided with biographical information and carefully edited notes.

Eaton, Harold T. ed. *Short Stories for Study and Enjoyment.* Garden City, New York: Doubleday, Doran & Co., 1929. Pp. 553. \$1.20.

This collection of thirty-two stories chosen expressly for the purpose of interesting the high-school student, provides a definite plan for the study of the short story as a type of literature.

SECONDARY-SCHOOL STUDIES

Moore, John Robert, ed. *Representative English Dramas*. Boston: Ginn & Co., 1929. P. 461. \$1.60.

This volume is one of a group intended for a survey course in English literature. An introduction and critical notes accompany the six plays.

Sones, W. W. D. and Harry, David P. Jr. *Sones-Harry High School Achievement Test*. Yonkers-on-Hudson, New York: World Book Co., 1929. Forms A and B. Pp. 24 each. \$1.90 net each for pkg. of 25.

Covers the subject fields of language and literature, mathematics, natural science, and social studies. The range of difficulty is sufficient for its use in all the years of the high school, with college freshmen, and with practice teachers in teachers colleges.

Schroeder, Ernest G. *Handbook of Physical Education*. Garden City, New York: Doubleday, Doran & Co., 1929. Pp. 323. \$2.00.

The Assistant Professor of Physical Education in the University of Iowa offers this basal text for colleges and universities, and provides a handbook for the director of physical education in high schools.

Spalding, Elizabeth Hill. *English at Work*. Yonkers-on-Hudson, New York: World Book Co., 1929. Pp. 297. \$1.28.

Designed by the former Head of the English Department of Pratt Institute to create in students a desire for self-expression.

Lawler, Lillian B. *Easy Latin Plays*. New York: Macmillan Co., 1929. Pp. 143. \$.80.

The vocabulary, forms and syntax of these plays have been restricted to those most common in the first two years of the Latin course.

McCormick, Thomas Carson. *Agriculture for Rural Teachers*. New York: Macmillan Co., 1929. Pp. 388. \$1.80. Rural Education Series.

Based on six years' experience in teaching, this text emphasizes the appreciation side of agriculture in contrast to the vocational.

Holzinger, Karl John, and Mitchell, Blythe Clayton. *Exercise Manual in Statistics*. Boston: Ginn & Co., 1929. Pp. 160. \$2.40.

Supplies the need for an exercise book in statistical methods for students in education since current textbooks rarely furnish adequate drill because the problems are too few, or are not graduated in difficulty.

Gray, Isabel McReynolds. *Short Scenes from Shakespeare and How to Act Them*. New York: Macmillan Co., 1929. Pp. 371. \$1.60.

This is a plea for the right to enjoy Shakespeare. The fifteen scenes were chosen because they reveal youthful characters in comic, heroic or tragic conflict with life, and in general from plays less frequently read. After experience in playing Shakespeare's characters the compiler believes that the student is then ready for a literary and critical study of them.

DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

Johnson, Roy Ivan, Searcy, Laura Anita, and Charters, Werrett Wallace. *Practical Studies in Composition with Specimen Readings*. New York: Macmillan Co., 1929. Pp. 432. \$1.48.

The following expressional activities are included: letter-writing, conversation, group discussion, making a speech, giving reports of experience, giving directions or explanations, and story-telling. Problems and exercises accompany the chapters.

Auslander, Joseph, and Hill, Frank Ernest. *The Winged Horse, the Story of the Poets and their Poetry, with Decorations by Paul Honré, and a Bibliography by Theresa West Elmendorf*. Educational Edition. Garden City, New York: Doubleday, Doran & Co., 1927. Pp. 451. \$1.50.

A simple comprehensive story of poetry and the poets for modern readers, young and old.

Auslander, Joseph, and Hill, Frank Ernest. *The Winged Horse Anthology*. Educational Edition. Garden City, New York: Doubleday, Doran & Co., 1929. Pp. 669. \$1.50.

Parallels the story of the poets as told in the Winged Horse, and attempts to encompass the best verse in English from Chaucer to the present time for those who are beginning to read poetry.

Hayes, Carlton J. H., and Moon, Parker Thomas. *Ancient and Medieval History*. New York: Macmillan Co., 1929. Pp. 893. \$2.00.

This high-school text has been brought within a compass that can be covered comfortably in a one-year course. The utmost effort has been made to render the narrative especially clear and simple, readable by young people, and above all, teachable. Cultural factors have been emphasized.

Breslich, Ernst R. *Seventh-year Mathematics*. New York: Macmillan Co., 1929. Pp. 284. \$.96.

The aim is to secure proficiency in the fundamental manipulative processes needed both in the course of ordinary life and in the pursuit of further mathematical knowledge. Inventory tests and other tests are provided so that the teacher can work out an effective remedial program either for classes or individuals.

McClenahan, Bessie Averne. *The Changing Urban Neighborhood*. Los Angeles; University of Southern California, 1929. Pp. 140. \$1.25 paper, \$2.00 cloth. University of Southern California Studies, Social Science Series, No. 1. Semicentennial Publications.

Presents briefly some of the facts and some of the conclusions which grew out of the detailed investigation of a specific area within Los Angeles. The inquiry is concerned primarily with the forms of association which underlie the various legally constituted and voluntarily organized functional agencies.

Jones, Gertrude. *Commencement*. New York: A. S. Barnes & Co., 1929. Pp. 116. \$1.00. The Extra Curricular Library.

SECONDARY-SCHOOL STUDIES

Offers suggestions, plans, organization aids, program material, and procedure which have been tried and found effective.

Matthias, Eugen. *The Deeper meaning of Physical Education*. Trans. by Carl L. Schrader. New York: A. S. Barnes & Co., 1929. Pp. 88. \$1.00.

The purpose of this lecture by the Professor of the Biology of Physical Education, University of Munich, is to bring to teachers in America a brief, yet far-reaching statement of the objectives, needs and results in physical education as they are conceived and practiced in another country.

Murphy, Carobel. *Thrift Through Education*. New York: A. S. Barnes & Co., 1929. Pp. 150. \$1.00. The Extra Curricular Library.

Presents research pertaining to thrift practices in many localities together with intensive controlled experimentation in a secondary school of some two thousand students in California.

Rogers, Frederick Rand. *Educational Objectives of Physical Activity*. New York: A. S. Barnes & Co., 1929. Pp. 109. \$1.00.

Attempts an analysis of physical education combined with a philosophy of education and life. Sources and charts, pp. 64-109.

Whitbeck, R. H. *High School Geography, Revised*. New York: Macmillan Co., 1929. Pp. 574. \$2.00.

The chapters dealing with the human side of geography have been thoroughly revised and brought up to date. This is especially true of the sections on Canada, Russia, Japan, and China, and of such industries as petroleum, rubber, and sugar. The list of Reference Books for the School Library has been revised. Graphs, curves, and statistical tables have been remade.

Billings, Neal. *A Determination of Generalizations Basic to the Social Studies Curriculum*. Baltimore: Warwick & York, 1929. Pp. 289. \$3.00. University Research Monographs, Number 11.

This research is founded on the belief that the present conventional courses in history, geography, and civics are failing to achieve as adequately as possible the great aims of the social studies.

Department of Secondary-School Principals

Atlantic City, N. J., February 24-26, 1930

MEETING PLACES

The coming meeting of the Department of Secondary-School Principals at Atlantic City, February 24-26, 1930, offers much of promise. We are fortunate in securing adequate meeting places where all members of the Association may have an opportunity of hearing the programs. Through the courtesy of Supt. Boyer of Atlantic City we have been given the use of the senior high school auditorium which

DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

has a seating capacity of 2,000 people. It is an attractive auditorium with admirable acoustic qualities.

For the accommodation of the junior college section, which assumes larger proportions each year, the main auditorium of the Chelsea Baptist Church has been secured. This church, with a seating capacity of 1,100, is located only a few short squares from the high school in the direction of the central hotel district. Fortunately, The President Hotel, where the departmental luncheon is to be held, is only one square from the high school auditorium. The Bronze Room of this hotel, seating for a dinner between five and six hundred guests, has been reserved for our use. All meeting places are therefore well grouped and conveniently situated with respect to the hotel facilities and the board walk.

THEME FOR THE MEETING

The officers feel that the national survey now being undertaken by the Bureau of Education affords the most interesting subject for thought. Following this idea, one phase of the survey is selected for each half-day session of the program. It is our hope, by this method, to open new lines of thought for the benefit of the survey and to place the machinery of our Association back of the Commissioner of Education in whatever way it may be possible.

THE PROGRAM

The opening session deals with the re-organization of secondary schools including the junior high school and the junior college. This session seeks to impress the fact on our whole Association that secondary education now embraces the period from the seventh to the fourteenth years inclusive, and that a re-organization of great proportions is taking place in our efforts to assimilate this enlarged field of educational service.

As to the junior high school and the junior college, the program of previous years has been followed by creating special sessions for each. The junior high school is less turbulent in its organization, but is in need of a great deal of constructive thought along the line of curriculum, curricular content, and articulation. Hence the formal program here presented. The junior college movement, all will agree, is in liquid formation. In fact, no two states seem to be approaching the issue in identically the same manner. In some places the higher institutions are making admission so selective that the high school communities are finding large numbers of high school graduates wishing to go on with their education but with no place to go. To meet this situation, junior colleges are springing into existence. In other places the junior college has become an addition to the time-honored high school. In still other communities there is a tendency for the junior college to take on regional formation, different communities joining in the undertaking; and in some communities there is evidence that the state may take over the task of developing the junior college. In fact, the junior college has so many angles of current interest that two sessions have been given to the subject direct and a special number has been added to the

SECONDARY-SCHOOL STUDIES

final program whereby the place of our junior college in our system of secondary education is to be debated.

Sections dealing with special phases of secondary education are as follows. One session dealing with research in secondary education will be held under the direction of the Committee on organization of investigations in Secondary Education of which Dr. Charles H. Judd, University of Chicago, is chairman. The extent of the research work being carried on by this commission is of such proportions that the officers felt a special session should be devoted to the undertaking. This will make it possible for the full committee of forty members to meet in continuous session with all members of the Association peculiarly interested in this type of work.

The imperative need for discussion of the financial problem involved in a national program of secondary education has prompted the formation of one session devoted to this subject alone. While school people naturally feel that public money for education is being well spent, it may be worth our while to think over in connection with finance alone such items as equitable salary schedules, maximum use of building facilities, class size, teacher load, administrative overhead, justifiable curriculum differentiation. Included within the scope of discussion for other programs which have been provided are the following of especial significance to modern trends in secondary education: adequate and workable methods of guidance of pupils in the secondary school, curriculum organization and content, a consideration of the problem of maintenance of standards on the one hand and caring for the needs of individuals of all ranges of ability on the other.

Ample provision is made for the discussion of technical and terminal courses in the upper senior high school and junior college which will be of great interest to those who cannot or may not wish to go on with their higher education. Because of their interest in the type of program to be presented, the American Association of Technical High Schools and Institutes has decided to meet with the Department of Secondary-School Principals. Supt. William J. Bogan of Chicago appears on the program as the representative of this organization.

The departmental luncheon will be held in the Bronze Room of The President Hotel Wednesday noon, February 26. Due to the fact that the afternoon session will doubtless be too large for the room, it is the plan to conduct the luncheon separately on a noon lunch club basis beginning at 12:30 o'clock and closing promptly at 2:00 o'clock. At this luncheon the usual *inter nos* affairs of the Association will be uppermost. The past presidents of the Association and many distinguished guests will be present.

MILO H. STUART, *President*

DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

Program

DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

Atlantic City, N. J., February 24-26, 1930

President, MILO H. STUART, Principal, Arsenal Technical Schools, Indianapolis, Ind.

First Vice-President, M. CHANNING WAGNER, Asst. Supt. of Schools, Wilmington, Delaware

Second Vice-President, W. F. WARREN, Principal of High School, Durham, North Carolina

Secretary-Treasurer, HARRY V. CHURCH, Superintendent, J. Sterling Morton Schools, Cicero, Ill.

Executive Committee:

J. STEVENS KADESCH, Head Master of High School, Medford, Mass.

JOHN W. HARBESEN, Principal of Junior College, Pasadena, California

ARTHUR M. SEYBOLD, Principal of Thomas Jefferson Junior High School, Cleveland, Ohio

A Series of Programs for General Discussion of Certain Phases of Secondary Education Which Are Proposed for Study by the National Survey.

"To make a study of the organization, administration, financing and work of secondary schools and of their articulation with elementary and higher education." From—Appropriation Measure (H.R. 15089)

FIRST SESSION

Monday, February 24, 2:30 P.M.—Senior High School Auditorium

Presiding—MILO H. STUART, President

General Topic—Secondary Education Re-organized and Administered to Include the Junior High School and the Junior College

Some Newer Viewpoints of the Re-organized Secondary School

T. J. McCORMACK, Principal of LaSalle-Peru Twp. High School, LaSalle, Ill.

The Place of Technical Courses in the Re-organized Secondary School

WILLIAM J. BOGAN, Superintendent of Schools, Chicago, Ill.

Integrating Guidance Agencies in the Re-organized Secondary School

ELI FOSTER, Principal of High School, Tulsa, Oklahoma

Meaning of Graduation in the Re-organized Secondary School

BANCROFT BEATLEY, Associate Professor of Education, Harvard University, Cambridge, Mass.

SECOND SESSION (First Section)

Tuesday, February 25, 9:30 A.M.—Main Auditorium, Chelsea Baptist Church

Presiding—M. CHANNING WAGNER, First Vice-President

General Topic—Articulation of Senior High School and Junior College

(Program planned by John W. Harbeson)

The Need for Integration in High School and Junior College Curricula

JESSE NEWLON, Director of Lincoln School, Teachers College, Columbia University, New York, N. Y.

Terminal Courses in High School and Junior College

J. J. OPENHEIMER, Stephens College, Columbia, Missouri

The Organization and Administration of the Four Year Junior College

JOHN AMHERST SEXSON, Superintendent of Schools, Pasadena, California

SECOND SESSION (Second Section)

Tuesday, February 25, 9:30 A.M.—Senior High School Auditorium

Presiding—W. F. WARREN, Second Vice-President

General Topic—The Work of the Junior High School

(Program planned by Arthur M. Seybold)

The Cry, More Education for Less Money—The Answer, The Cleveland Curriculum

WILLIAM L. CONNOR, Director of Research, Cleveland, Ohio

SECONDARY-SCHOOL STUDIES

Vitalized Reading for Junior High Schools

CLARENCE STRATTON, Director of English, Cleveland, Ohio

The Place of the Junior High School in Our Changing Secondary Schools

PHILIP W. L. COX, Professor of Education, New York University, New York, N. Y.

THIRD SESSION

Tuesday, February 25, 2:30 P.M.—Senior High School Auditorium

Presiding—MILO H. STUART, President

General Topic—Financing

Mounting Costs of Secondary Education

HARRY E. WINNER, Principal of South Hills High School, Pittsburgh, Pa.

How and Where to Economize in Secondary Education

R. R. RITCHIE, Asst. Supt. of Schools, Atlanta, Georgia

Where Not to Economize in Secondary Education

W. W. HAGGARD, Supt. of Joliet Twp. High School and Junior College, Joliet, Ill.

Financing Secondary Education

PAUL R. MORT, Director of School of Education, Teachers College, Columbia University, New York, N. Y.

FOURTH SESSION (First Section)

Wednesday, February 26, 9:30 A.M.—Senior High School Auditorium

Presiding—ARTHUR M. SEYBOLD, Executive Committee Member

General Topic—Articulation of Junior High School and Senior High School

Articulation Between the Grades and the Junior High School

BARNETT W. TAYLOR, Principal, Patrick Henry Junior High School, Cleveland, Ohio

Articulation Between Junior High School and Senior High School

A. J. BURTON, Principal, East High School, Des Moines, Iowa

Articulation Between Senior High School and the College

J. STEVENS KADESCH, Head Master, Medford High School, Medford, Mass.

Articulation, Some Fundamental Purposes and Its Ideals

THOMAS H. BRIGGS, Professor of Education, Teachers College, Columbia University, New York, N. Y.

FOURTH SESSION (Second Section)

Wednesday, February 26, 9:30 A.M.—Main Auditorium, Chelsea Baptist Church

Presiding—JOHN W. HARBESEN, Executive Committee Member

General Topic—The Work of the Junior College

A Follow-Up Program for Junior College Graduates

VIERLING KERSEY, State Supt. of Public Instruction, Sacramento, California

Curriculum Organization in Junior Colleges

LEONARD V. KOOS, Professor of Education, University of Chicago, Chicago, Ill.

Teacher Load in Junior Colleges

RALPH BUSH, Director of Santa Monica Junior College, Santa Monica, California

FOURTH SESSION (Third Section)

Wednesday, February 26, 9:00 to 11:00 A.M.—Bronze Room, President Hotel
Open Meeting of the Committee on Organization of Investigations in Secondary Education

Presiding—CHARLES H. JUDD, Chairman, University of Chicago

This meeting will be in charge of the Committee on Organization of Investigations in Secondary Education. Reports on co-operative research will be presented by the following members of the committee:

WILLIAM H. BRISTOW, Dept. of Public Instruction, Harrisburg, Pa.

JESSE B. DAVIS, Boston University

WILLIAM F. EWING, Asst. Supt. of Schools, Oakland, California

WILLIAM PROCTOR, Stanford University

L. V. KOOS, University of Chicago

DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

Projects related to the work of the committee will be considered, and plans for the following year will be acted upon. Members of the committee are as follows:

CHARLES H. JUDD, chairman
L. V. KOOS
WILLIAM PROCTOR
JESSE B. DAVIS
A. B. MEREDITH
SAMUEL M. NORTH
WILLIAM H. BIRSTOW
FRANK G. PICKELL
WILLIAM F. EWING
FRANCIS L. BACON
MILo H. STUART
V. K. FROULA

DEPARTMENTAL LUNCHEON

Wednesday, February 26, 12:30 to 2:30 P.M.—Bronze Room, President Hotel
Presiding—MILo H. STUART, President

This year the departmental luncheon will be restricted to the noon hour, closing in time for the afternoon session. The past presidents of the Association will be featured in the program and a number of guests will be present, among whom may be mentioned Hon. William J. Cooper, Commissioner of Education.

FIFTH SESSION

Wednesday, February 26, 2:30 P.M.—Senior High School Auditorium
Presiding—MILo H. STUART, President

General Topic—Significant Issues in Secondary Education
The Junior College in the State's Program of Education

THOMAS LLOYD JONES, Professor of Education, University of Wisconsin,
Madison, Wisconsin

GEORGE F. ZOOK, President, University of Akron, Akron, Ohio
Standards Versus Flexibility in the Secondary Schools

HENRY W. HOLMES, Dean of School of Education, Harvard University,
Cambridge, Mass.

Outlook for Secondary Education in America

HON. WILLIAM J. COOPER, Commissioner of Education, Washington, D.C.

DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

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Please remit in advance

H. V. Church, Executive Secretary
J. Sterling Morton High School
Cicero, Illinois.

DEPARTMENT OF SECONDARY-SCHOOL PRINCIPALS

ADDRESSES

of

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